

FIG. 1

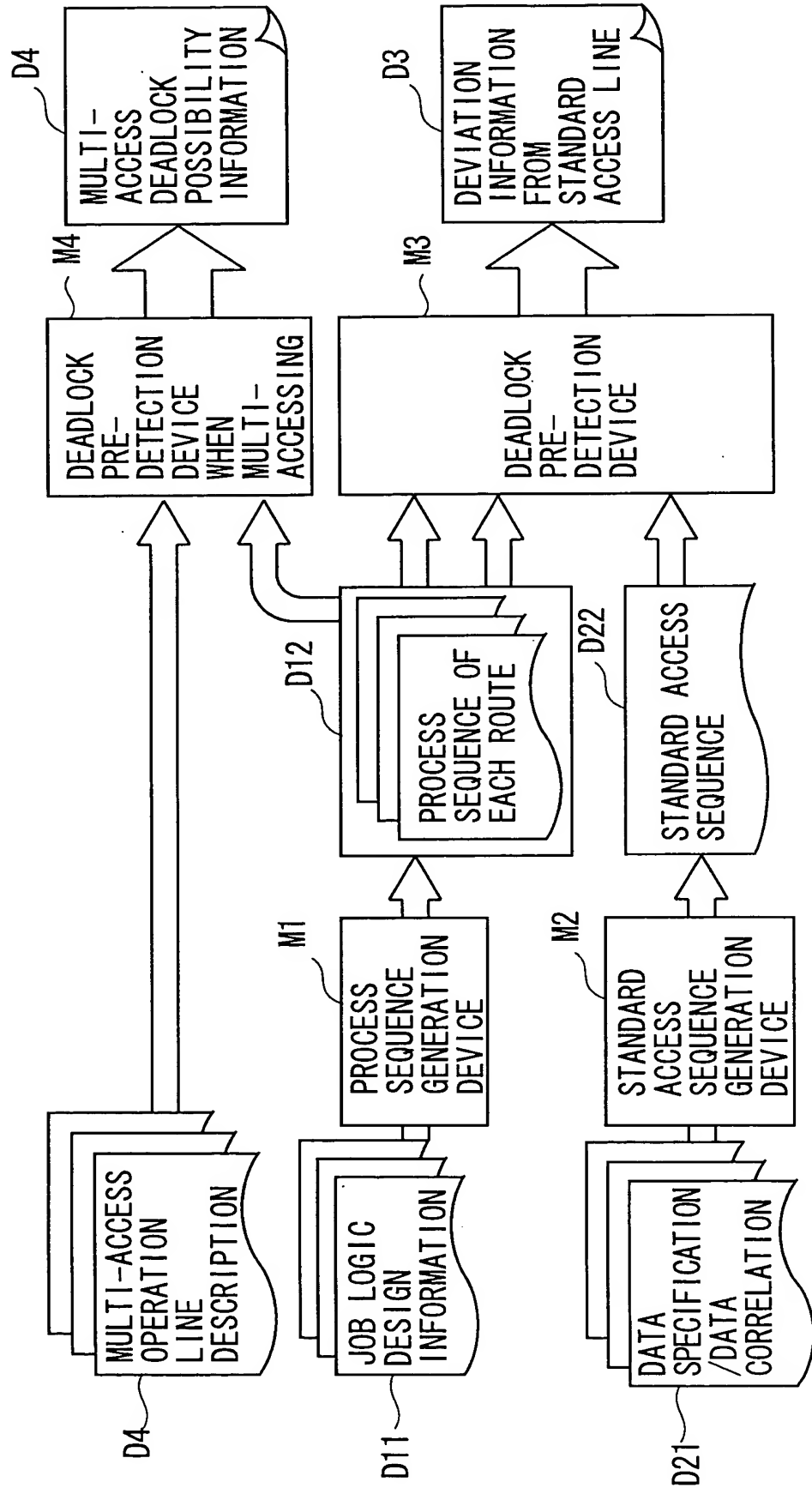


FIG. 2

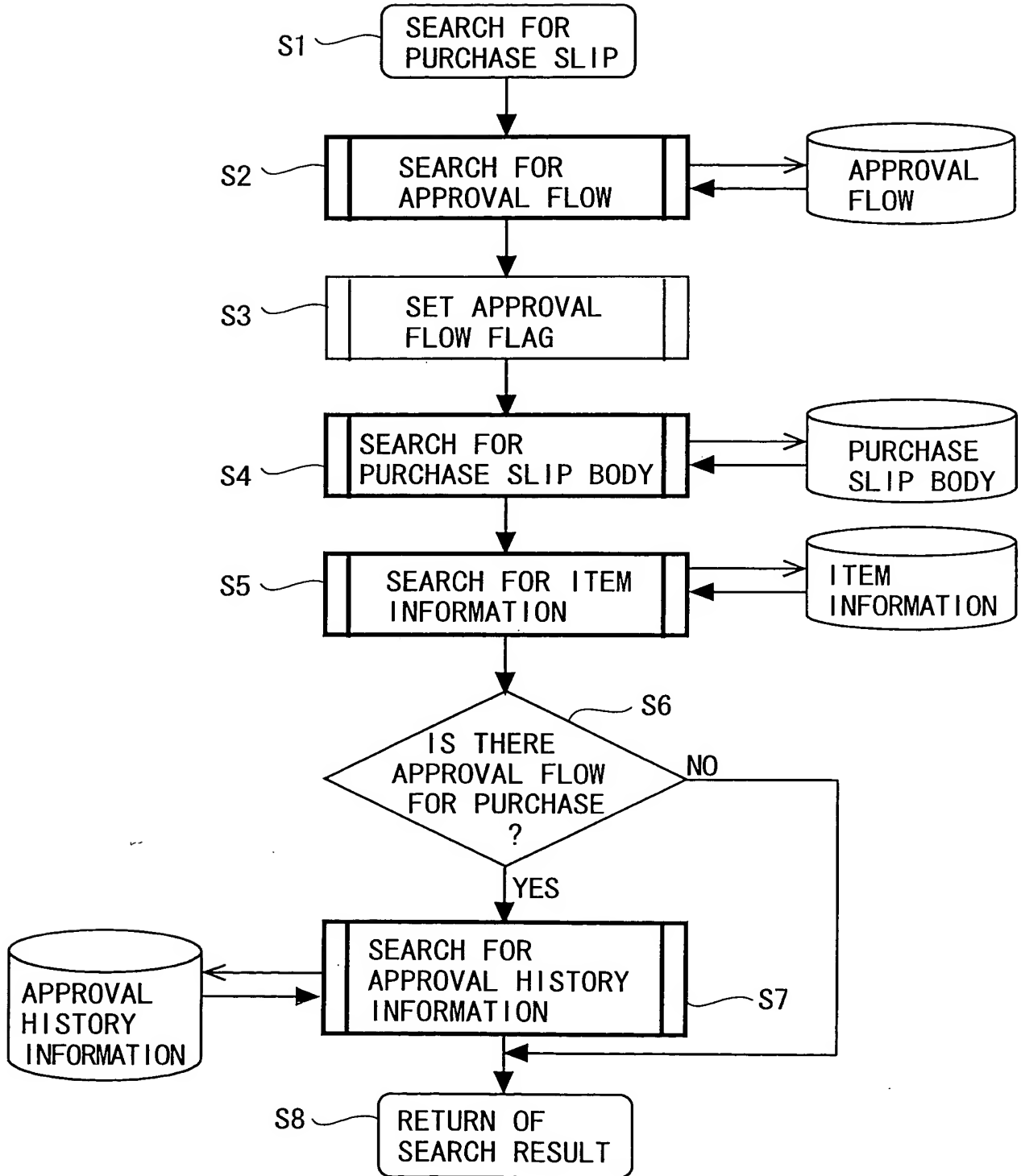


FIG. 3

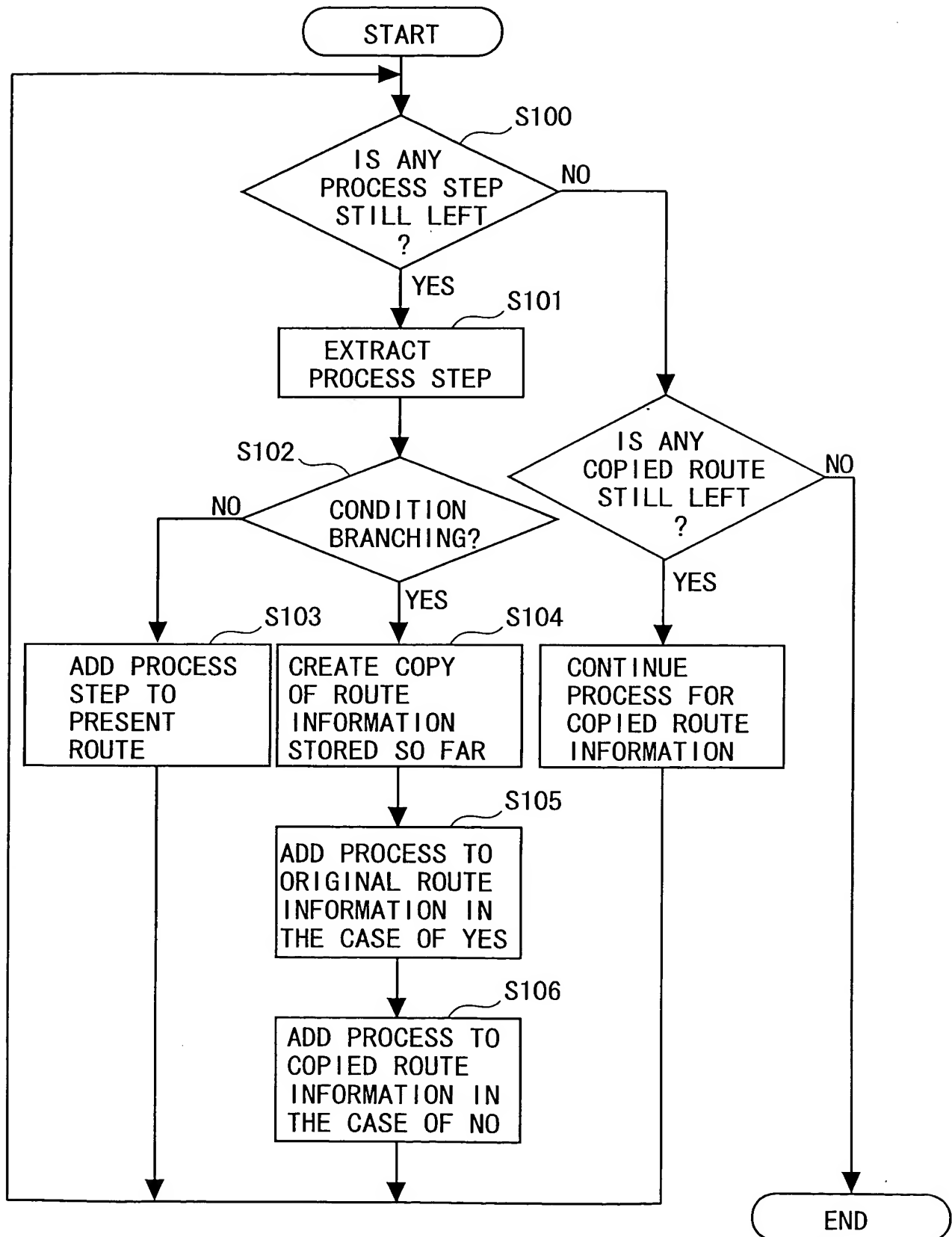


FIG. 4

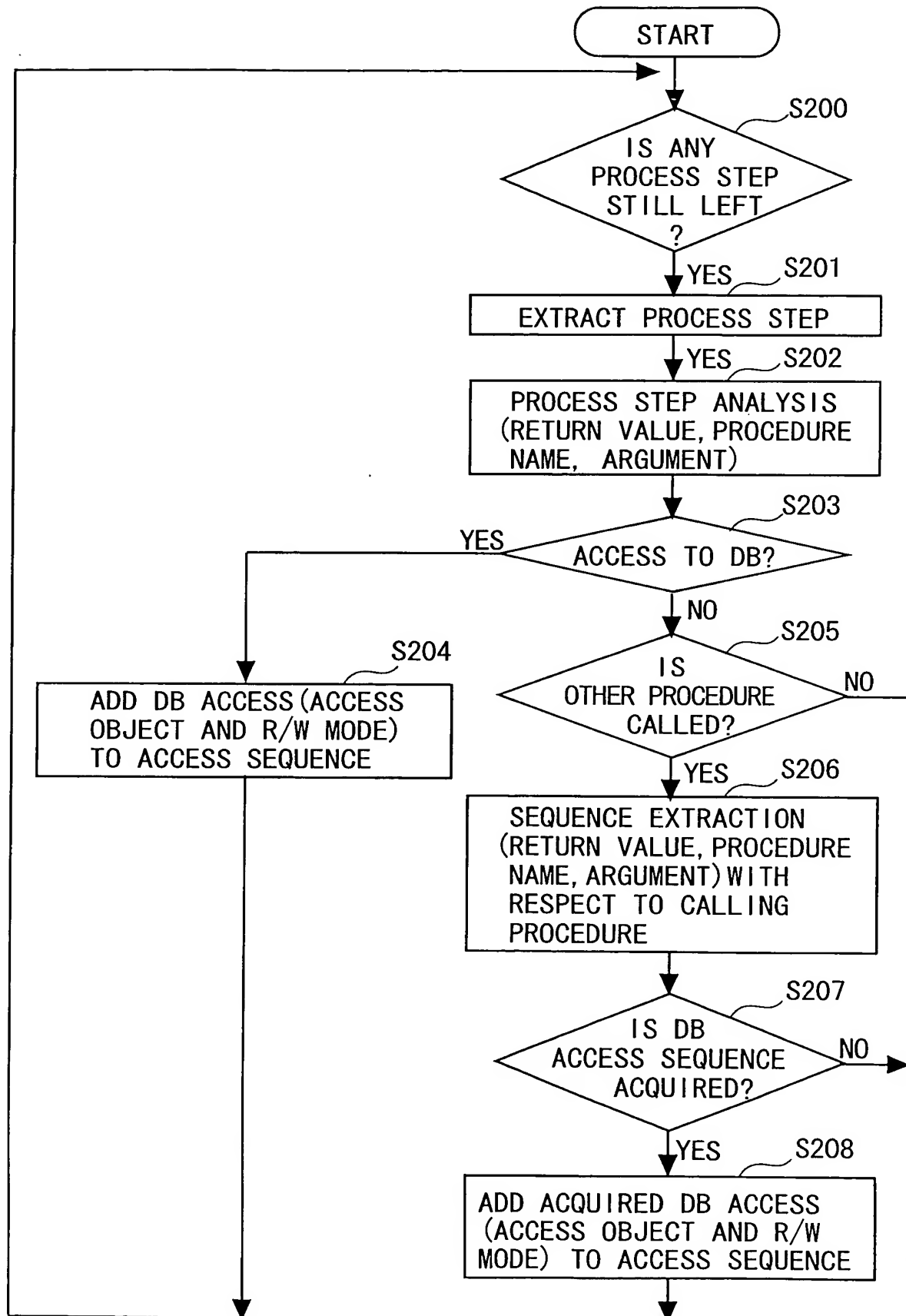


FIG. 5

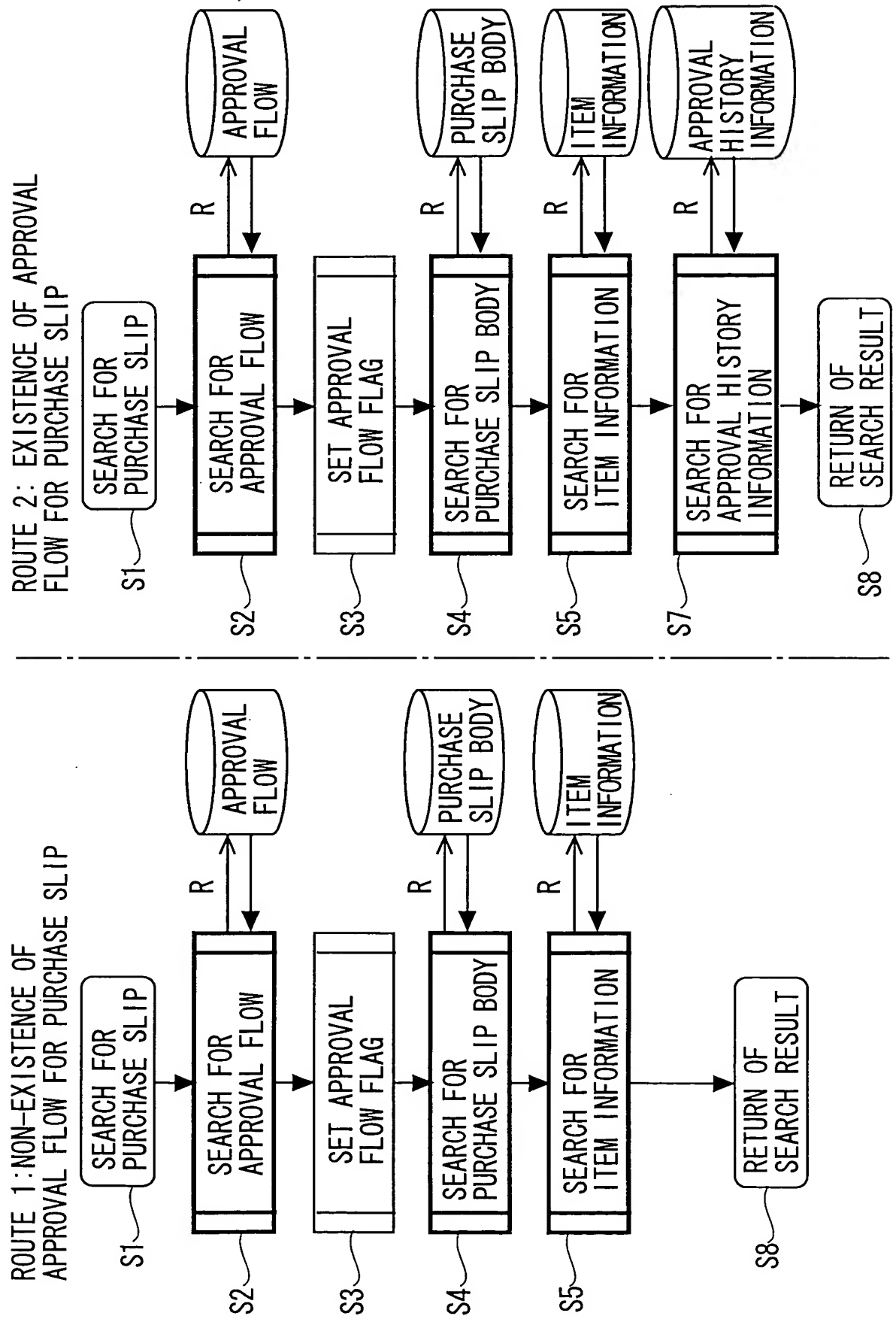
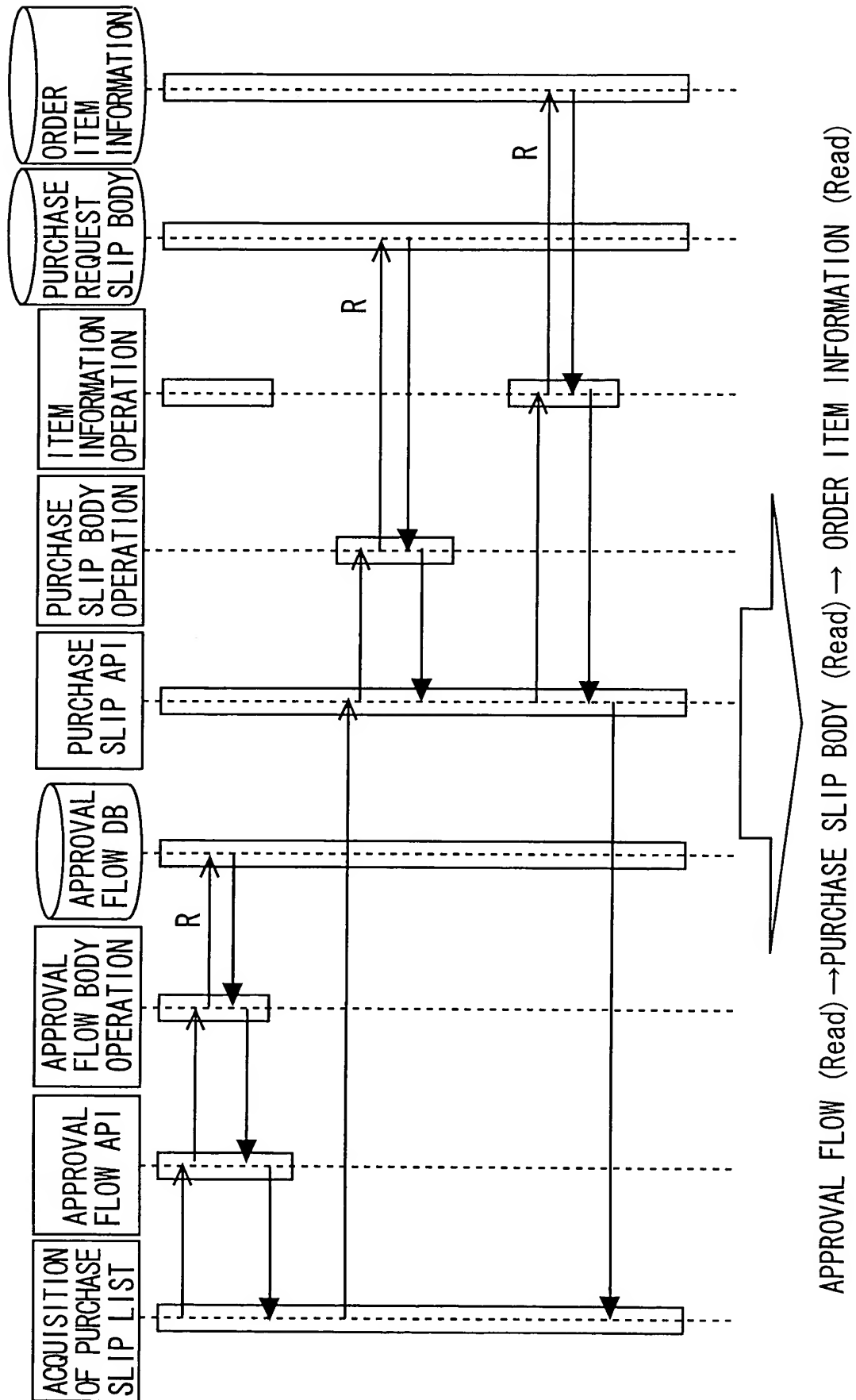


FIG. 6



```

graph TD
    subgraph "EXAMPLE OF DATA CORRELATION DIAGRAM"
        direction TB
        subgraph "PURCHASE SLIP BODY TABLE"
            P1[PRIMARYKEY SLIP ID]
            P2[BUYER NO (APPLICANT MANAGEMENT NUMBER)]
            P3[BUYER GOLD (PURCHASE ENTERPRISE ID)]
            P4[SUPPLIER ID (REQUESTER SALES ENTERPRISE ID)]
            P5[SALES MAN ID (IN-CHARGE-OF-SALES PERSON ID)]
            P6[STATUS (SLIP PROCESS STATUS)]
        end

        subgraph "PURCHASE APPLICANT INFORMATION TABLE"
            A1[PRIMARYKEY USERNO (USER MANAGEMENT NUMBER)]
        end

        subgraph "IN-CHARGE-OF-SALES PERSON INFORMATION TABLE"
            I1[PrimaryKey USERNO (SLIP PROCESS STATUS)]
        end

        subgraph "ORDER ITEM INFORMATION TABLE"
            O1[PRIMARYKEY ID (ITEM INFORMATION ID)]
            O2[PRODUCT ID (COMMERCIAL ARTICLE ID)]
            O3[QUANTITY (ORDER UNIT NUMBER)]
            O4[SLIP ID (PARENT SLIP ID)]
        end

        subgraph "PURCHASE ENTERPRISE INFORMATION TABLE"
            E1[PRIMARYKEY COMPANY ID (ENTERPRISE IDENTIFICATION NUMBER)]
        end

        subgraph "PURCHASE ENTERPRISE INFORMATION TABLE"
            E2[PRIMARYKEY COMPANY ID (ENTERPRISE IDENTIFICATION NUMBER)]
        end

        subgraph "COMMERCIAL ARTICLE INFORMATION TABLE"
            C1[PRIMARYKEY ID (COMMERCIAL ARTICLE INFORMATION ID)]
            C2[ARTICLE INFORMATION ID]
            C3[CATEGORY (BELONGING CATEGORY)]
        end

        subgraph "PRICE INFORMATION TABLE"
            P2_1[PRIMARYKEY ID (PRICE INFORMATION ID)]
            P2_2[PRODUCT ID (COMMERCIAL ARTICLE INFORMATION ID)]
            P2_3[SUPPLIER ID (SALES ENTERPRISE ID)]
            P2_4[BUYER ID (SALES ENTERPRISE ID)]
        end

        P1 --> O1
        P2 --> O1
        P3 --> O1
        P4 --> O1
        P5 --> O1
        P6 --> O1
        A1 --> E1
        I1 --> E2
        E1 --> O1
        E2 --> O1
        O1 --> C1
        O2 --> C1
        O3 --> C1
        O4 --> C1
        C1 --> P2_1
        C2 --> P2_1
        C3 --> P2_1
        P2_1 --> P2_2
        P2_1 --> P2_3
        P2_1 --> P2_4
    end
    
```

FIG. 8

EXAMPLE OF DESCRIPTION OF DATA SPECIFICATIONS

ROLE: USER INFORMATION TABLE NAME: CT_TUSPAR AVERAGE NUMBER OF RECORDS: 3000			
COLUMN: USERNUM	CHAR (32)	MANAGEMENT NUMBER	PLIMARYKEY
USRNAME	CHAR (32)	USER NAME	
USRPWD	CHAR (32)	PASSWORD	
USRCOMP	CHAR (32)	BELONGING COMPANY CODE	
CORRESPONDS CT_TCMPCOM.COMID TYPE=1:1 ACCESS-SQESNCE USRCOMP.>CT_TCMPCOM.COMID USROFFICE CHAR (32) BELONGING OFFICE CODE USRBELONG CHAR (32) BELONGING ORGANIZATION CODE MAILADDR CHAR (512) MAIL ADDRESS PHONENUMBER CHAR (12) TELEPHONE NUMBER FAXNUMBER CHAR (12) FAX NUMBER			

}
 }
 }
 SAME CORRESPONDENCE
 AS COLUMN COMID IN
 TABLE CT_TCMPCOM
 IS 1 : 1, EXTRACT
 USRCOMP, AND REFER
 TO RECORD IN WHICH
 COMID IS COINCIDENT
 WITH THIS IN
 CT_TCOMCOM

ACTUALIZING FORMAT ON COMPUTER IS XML-BASED DESCRIPTION OR INVOLVES USING Java CLASS AND C++ CLASS GENERATED FROM XML-BASED DESCRIPTION

FIG. 9

EXAMPLE OF DESCRIPTION OF DATA SPECIFICATIONS (XML-BASED REPRESENTATION)

```
<data-definition>
<header><table-name>CT_SUSRPAR</table-name>
<table-role>USER_INFORMATION</table-role>
<average-hit-records>3000</average-hit-records>
</header>
<columns>
<column is-Primary-key="true">
<name>USERNUM</name><type>char32</type><role>MANAGEMENT_NUMBER</role>
</column>
<column> <name>USERNAME</name><type>char32</type><role>USER_NAME</role></column>
<column> <name>USRPWD</name><type>char32</type><role>PASSWORD</role></column>
<column> <name>USCOMP</name><type>char32</type><role>BELONGING_COMPANY_CODE</role>
<corresponds><tblcolumn>CT_TCMPCOM.COMID</tblcolumn>
<access-seq>USRCOMP, CT_TCMPCOM.COMID</access-seq>
</corresponds>
</column>
<column> <name>USROFFICE</name><type>char32</type><role>BELONGING_OFFICE_CODE</role>
</column>
<column> <name>USRBELOING</name><type>char32</type><role>BELONGING_ORGANIZATION_CODE</role>
</column>
<column> <name>MAILSDDR</name><type>char512</type><role>MAIL_ADDRESS</role>
</column>
<column> <name>PHONENUMBER</name><type>char12</type><role>TELEPHONE_NUMBER</role>
</column>
<column> <name>FAXNUMBER</name><type>char12</type><role>FAX_NUMBER</role>
</column>
</columns>
</data-definition>
```

DESCRIBE
TABLE NAME,
ROLE, AVERAGE
NUMBER OF
HIT RECORDS
IN HEADER
FIELD, AND
DESCRIBE
COLUMN NAME,
TYPE, LENGTH
AND ROLE OF
COLUMN, AND
COLUMN NAME,
COLUMN
SEQUENCE, ETC.
OF OTHER TABLE
HAVING SAME
ROLE AS ABOVE

FIG. 10

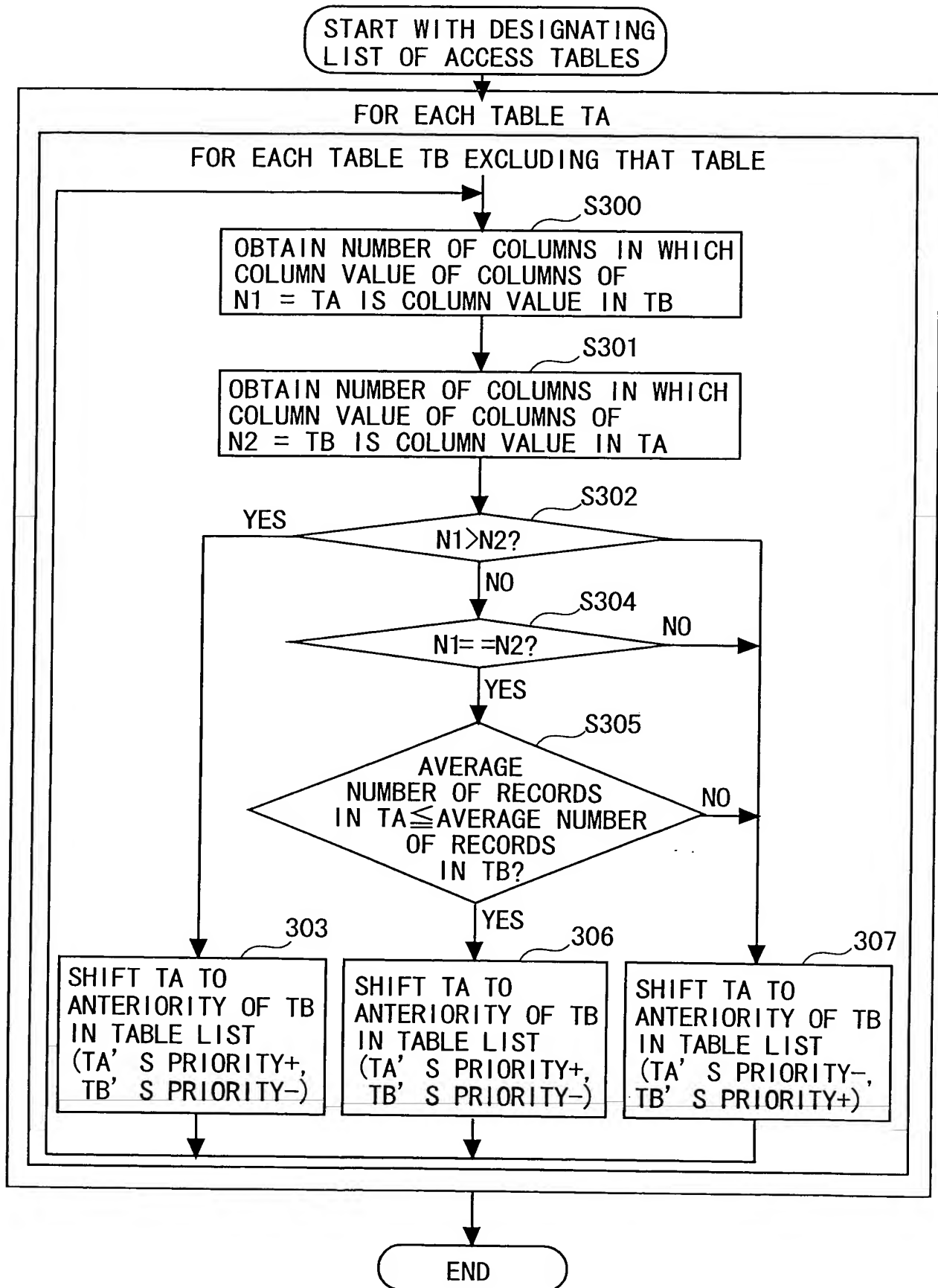


FIG. 11

EXAMPLE OF STANDARD DATA ACCESS SEQUENCE

TABLE NAME	ORDER
PURCHASE REQUEST SLIP	1
ITEM INFORMATION	2
PURCHASE APPLICANT INFORMATION	3
IN-CHARGE-OF-SALES PERSON INFORMATION	3
COMMERCIAL ARTICLE INFORMATION	5
PRICE INFORMATION	6
PURCHASE ENTERPRISE INFORMATION	7
SALES ENTERPRISE INFORMATION	8

300 CASES ON AVERAGE ARE HIT

1500 CASES ON AVERAGE ARE HIT

3000 CASES ON AVERAGE ARE HIT

GIVING PRIORITIES OF RESPECTIVE TABLES ACCORDING TO PROCEDURES IN FIG. 11
THERE IS OBTAINED ANTERIORITY/POSTERIORITY RELATION SUCH AS
PURCHASE SLIP INFORMATION>ITEM INFORMATION>COMMERCIAL
ARTICLE INFORMATION>PRICE INFORMATION>PURCHASE ENTERPRISE
INFORMATION/SALES ENTERPRISE INFORMATION/PURCHASE
REQUEST SLIP>IN-CHRG-OF-PURCHASE PERSON
INFORMATION>PURCHASE ENTERPRISE INFORMATION/PURCHASE
REQUEST SLIP>IN-CHARGE-OF-SALES PERSON INFORMATION>SALES
ENTERPRISE INFORMATION, HOWEVER
ANTERIORITY/POSTERIORITY RELATIONS BETWEEN PURCHASE
APPLICANT INFORMATION AND SALES APPLICANT INFORMATION AND
BETWEEN PURCHASE APPLICANT/IN-CHARGE-OF-SALES PERSON
INFORMATION AND COMMERCIAL ARTICLE INFORMATION/
PRICE INFORMATION ARE NOT DETERMINED ONLY FROM THIS.
SUCH BEING THE CASE, ANTERIORITY/POSTERIORITY RELATIONS
ARE ESTABLISHED BY USE OF HEURISTICS SUCH AS AVERAGE
VALUE OF RECORD HIT CASE COUNT, ETC.
HEREIN, ORDER IS GIVEN BY SUCH HEURISTICS THAT PURCHASE
APPLICANTS ARE LESS THAN SALES APPLICANTS IN HIT RECORD
CASE COUNT, AND PURCHASE APPLICANTS AND IN-CHARGE-OF-
SALES PERSONS ARE LESS THAN COMMERCIAL ARTICLES IN AVERAGE
VALUE OF HIT RECORD CASE COUNT.

FIG. 12

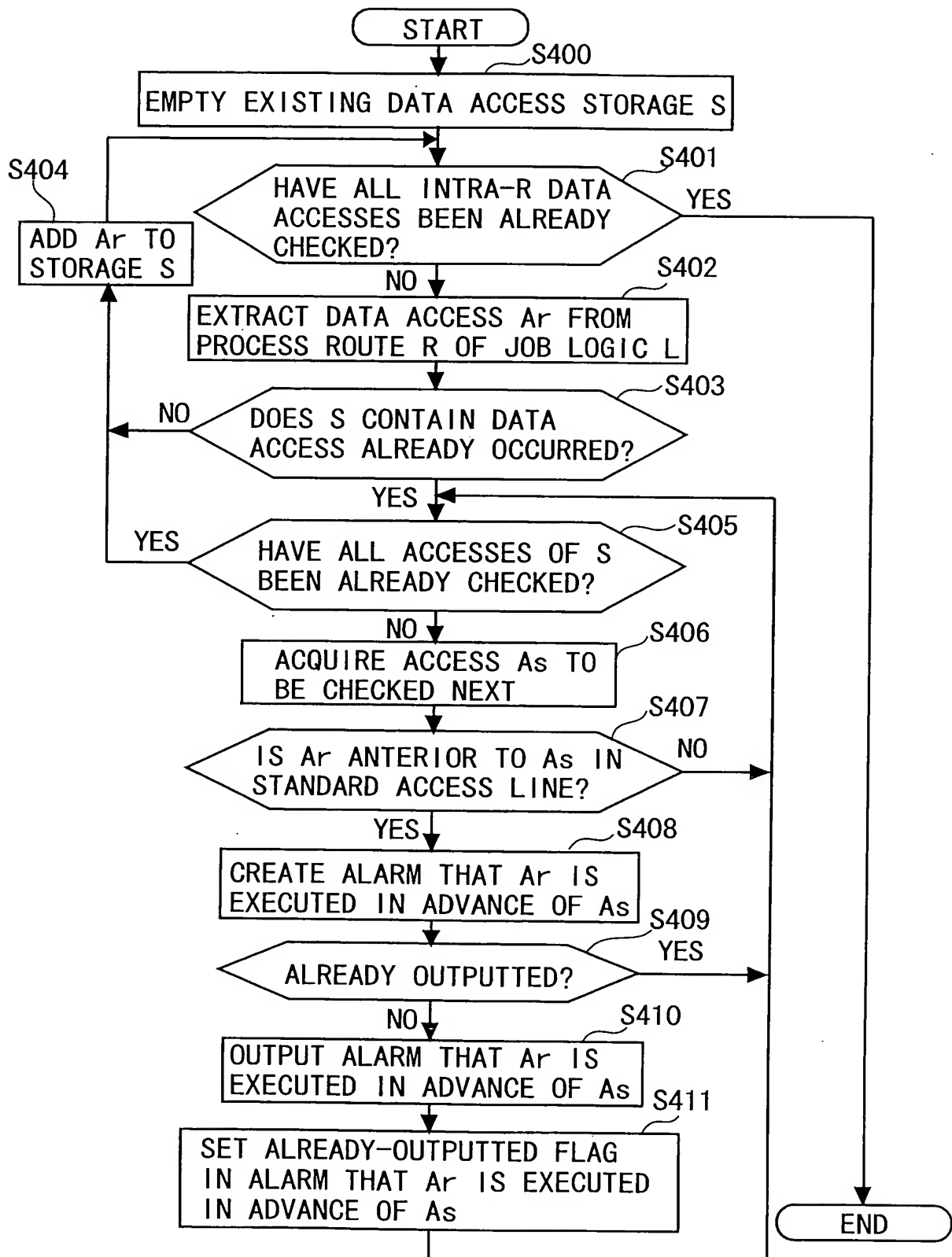
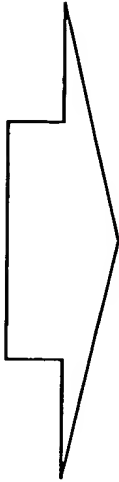


FIG. 13

ROUTE ID:01050-0001
 JOB PROCESS:01050 (APPROVAL OF PURCHASE REQUEST SLIP)
 OCCURRENCE CONDITION:
 CONTEXT INFORMATION, USER INFORMATION USER TYPE= =
 PURCHASE MANAGER, DB ACCESS SEQUENCE
 (1) APPROVAL FLOW ACQUISITION (READ)
 (2) PURCHASE REQUEST SLIP SEARCH (READ)
 (3) ORDER ITEM INFORMATION SEARCH (READ)
 (4) COMMERCIAL ARTICLE INFORMATION ACQUISITION (READ)
 (5) PRICE INFORMATION SEARCH (READ)
 (6) APPROVAL HISTORY INFORMATION SEARCH (READ)
 (7) PURCHASE REQUEST SLIP UPDATING (WRITE)
 (8) APPROVAL HISTORY INFORMATION UPDATING (WRITE)

STANDARD ACCESS SEQUENCE

PURCHASE SLIP BODY
ITEM INFORMATION
COMMERCIAL ARTICLE INFORMATION
PRICE INFORMATION
APPROVAL FLOW INFORMATION
APPROVAL HISTORY INFORMATION
USER INFORMATION
ENTERPRISE INFORMATION



[ALARM] APPROVAL FLOW INFORMATION IS ACCESSED ANTERIOR TO PURCHASE SLIP BODY
 [ALARM] APPROVAL FLOW INFORMATION IS ACCESSED ANTERIOR TO ITEM INFORMATION
 [ALARM] APPROVAL FLOW INFORMATION IS ACCESSED ANTERIOR TO COMMERCIAL ARTICLE INFORMATION
 [ALARM] APPROVAL FLOW INFORMATION IS ACCESSED ANTERIOR TO PRICE INFORMATION

FIG. 14

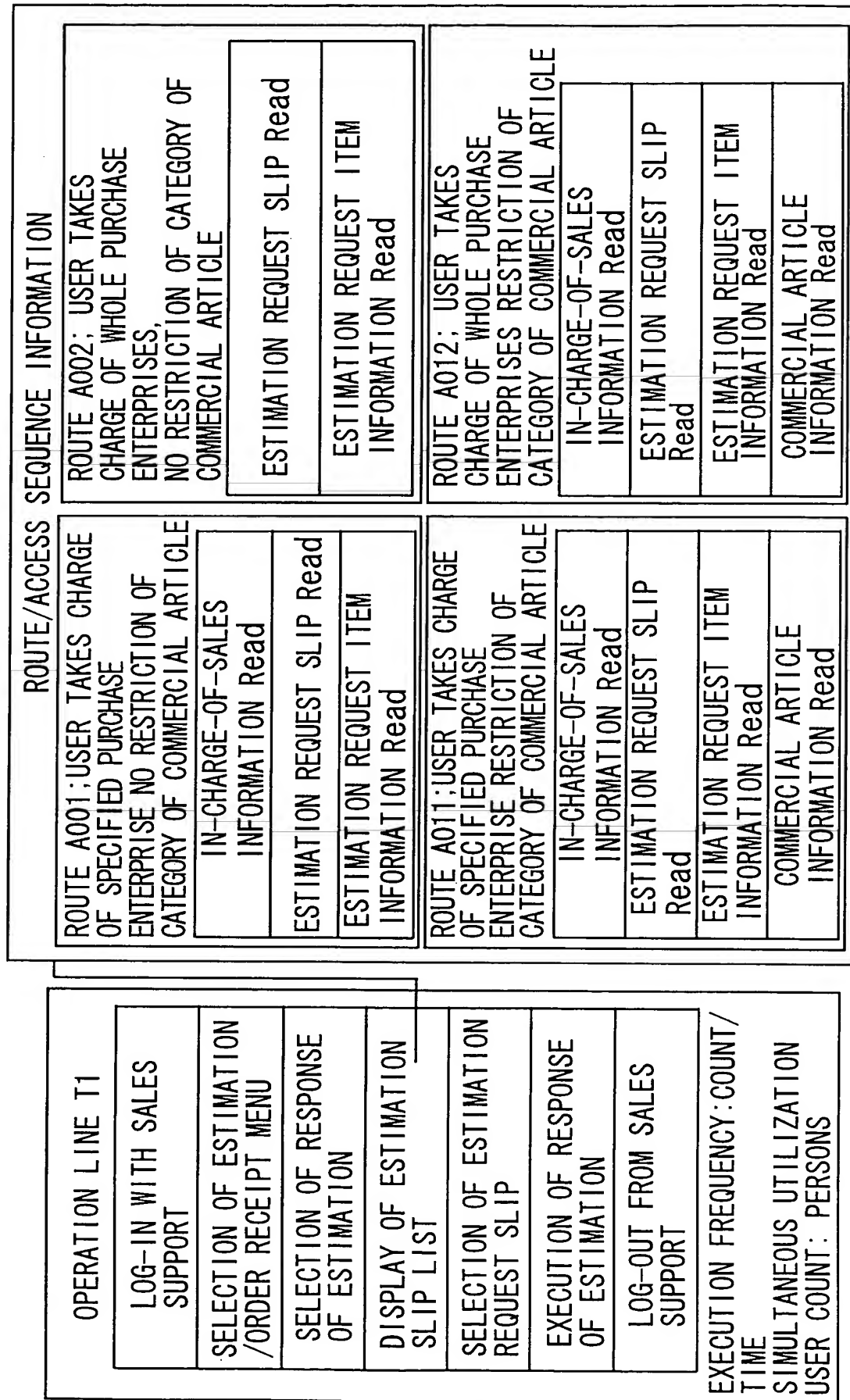


FIG. 15

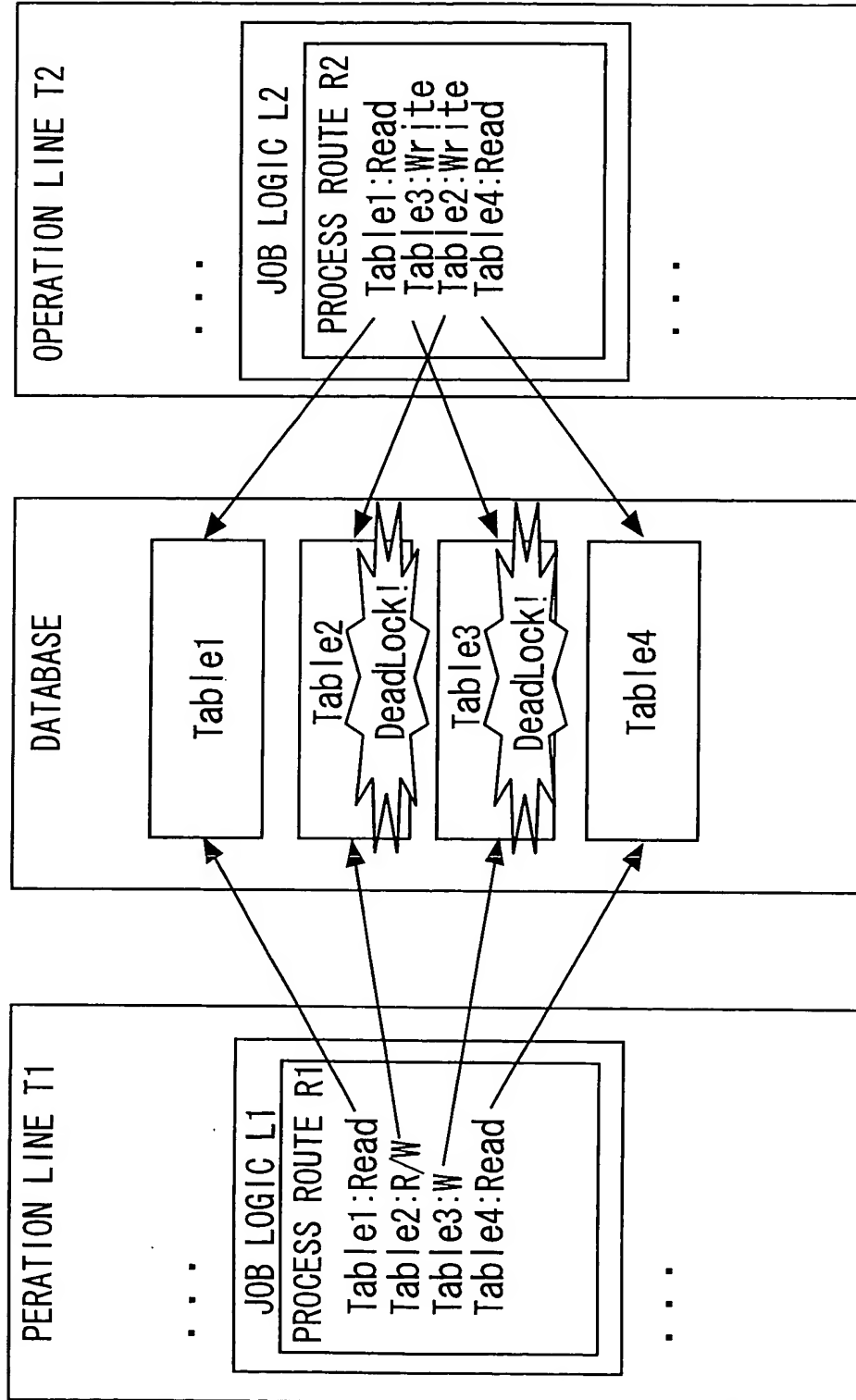


FIG. 16

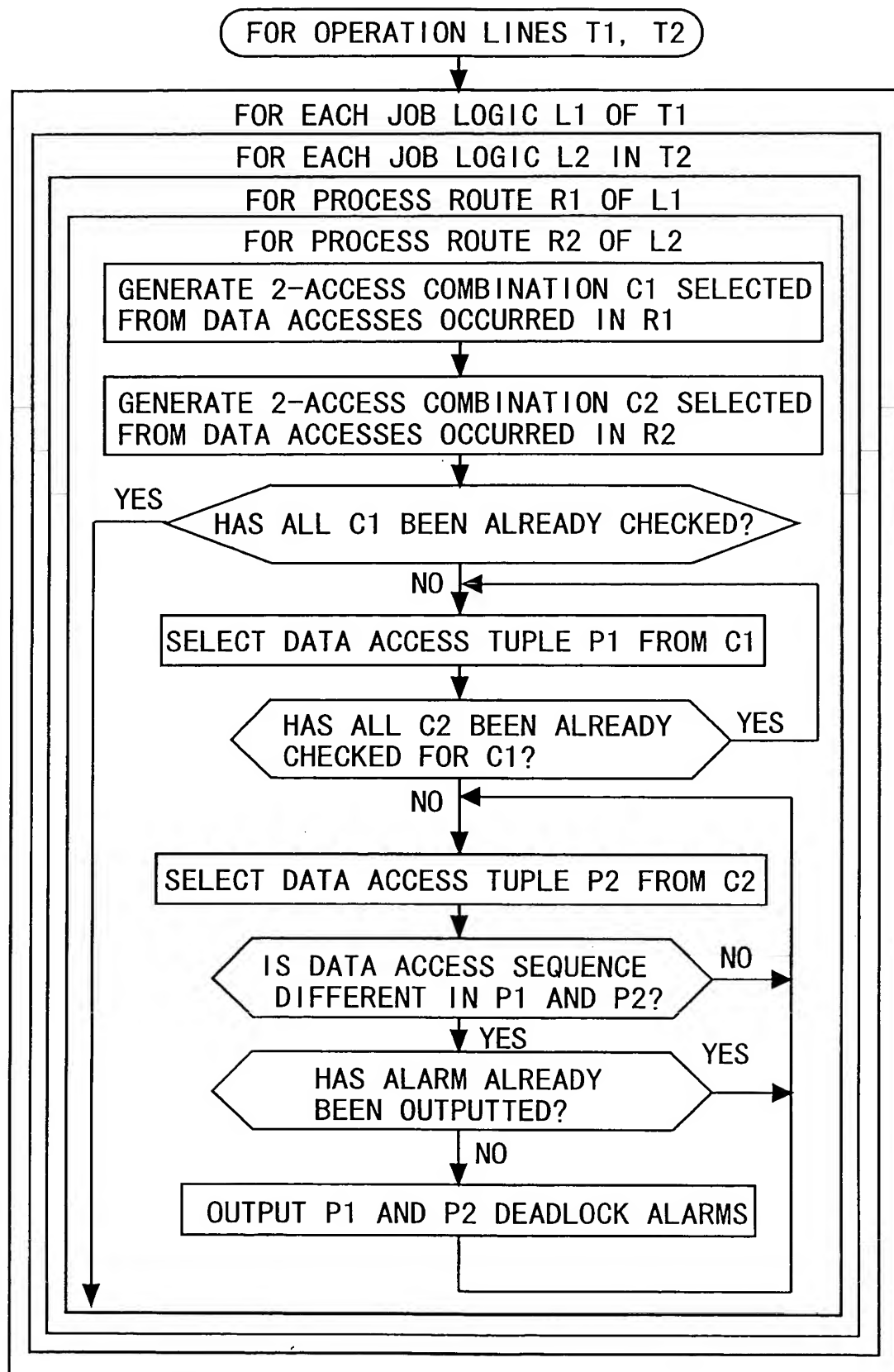


FIG. 17

